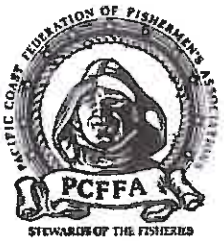

NORTH COAST RIVERS ALLIANCE

October 17, 2011

Rain Healer
South Central California Area Office
U.S. Bureau of Reclamation
1243 N St
Fresno, CA 93721

Subject: **Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District's San Joaquin River Improvement Project (SJRIP) FONSI-10-030**

Dear Ms. Healer:

We appreciate the opportunity to comment on the proposed demonstration project that will that will transport 'in ground' Panoche Water District polluted sump water directly to where it will be 'treated' by a yet to be disclosed treatment process. The treatment process will produce selenium hazardous waste residues, which will be trucked to a disposal site, as well as contaminated wastewater that will be then discharged in an irrigation ditch under a NPDES permit back into the SJRIP, Mud Slough, the San Joaquin River and the Delta. The Project may last 18 months or

operate indefinitely with an unknown operating time period that *may* need additional analysis.'[1]

We applaud the Bureau's recognition that these west side water pollution discharges need to comply with the Clean Water Act and require a National Pollutant Discharge Elimination System [NPDES] permit.[2] The project proposes the discharge of concentrations of selenium above Clean Water Act standards even after treatment along with other contaminants such as salt, boron, mercury.[3] We find there is insufficient data presented to make an informed decision regarding the impacts from the project. The full range of alternatives is not examined and without sufficient data regarding costs, treatment methods, and the levels of contaminants in the source water to be treated, one cannot meet the National Environmental Policy Act (NEPA) requirements to determine economic and technical feasibility. Absent is any consideration of the only proven effective method of solving this water pollution—stopping the import of water and application to these poisonous soils–and without cost figures, the public cannot make an informed decision regarding the environmental impacts, costs and trade-offs. It appears the DEA attempts to meet these requirements by citing other drainage documents[4] and yet, this new project is a significant departure from the treatment proposals contained in those documents. For example, the proposed treatment does not propose to remove salt, boron, or mercury and will continue to discharge lethal levels of selenium.

It is discouraging that despite the work of the last twenty plus years, Reclamation is presenting another project with a yet to be identified treatment process to remove selenium alone, without any cost analysis or analysis of the feasibility or consideration of a full range of alternatives, including the reduction of imported water to irrigate these poisonous lands—as has been recommended by numerous federal and state agencies as the most cost effective control solution that protects downstream users. This latest project is just another delay and distraction in meeting Clean Water Act water quality standards and will likely waste scarce taxpayer dollars.

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[1] http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8298

[2] http://water.epa.gov/lawsregs/guidance/wetlands/section402.cfm

[3] http://www.usbr.gov/mp/sccao/sld/docs/index.html No information could be found on mercury treatment removal levels in the NEPA documents or previous 2004 or 2005 pilot testing. The conclusion mercury levels are projected to be low, is not supported by data.

[4] http://www.usbr.gov/mp/sccao/sld/docs/index.html

There is insufficient information to make a finding of no significant impact. The FONSI and DEA do not meet the legal requirements of the National Environmental Policy Act [NEPA]. A full EIS is needed to prevent further waste of taxpayer dollars and to assure an alternative that will prevent the continued pollution of the water ways with selenium, salt and contaminants is adopted.

Respectfully submitted,

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Sierra Club California

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Bill Jennings
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Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League

Conner Everts
Executive Director
Southern California Watershed Alliance

Frank Egger, President
North Coast Rivers Alliance

Attachment: Figures 1-6 & Detailed comments

Lethal Concentrations of Selenium in Irrigation Drainage Discharged from the San Luis Drain (Site B)

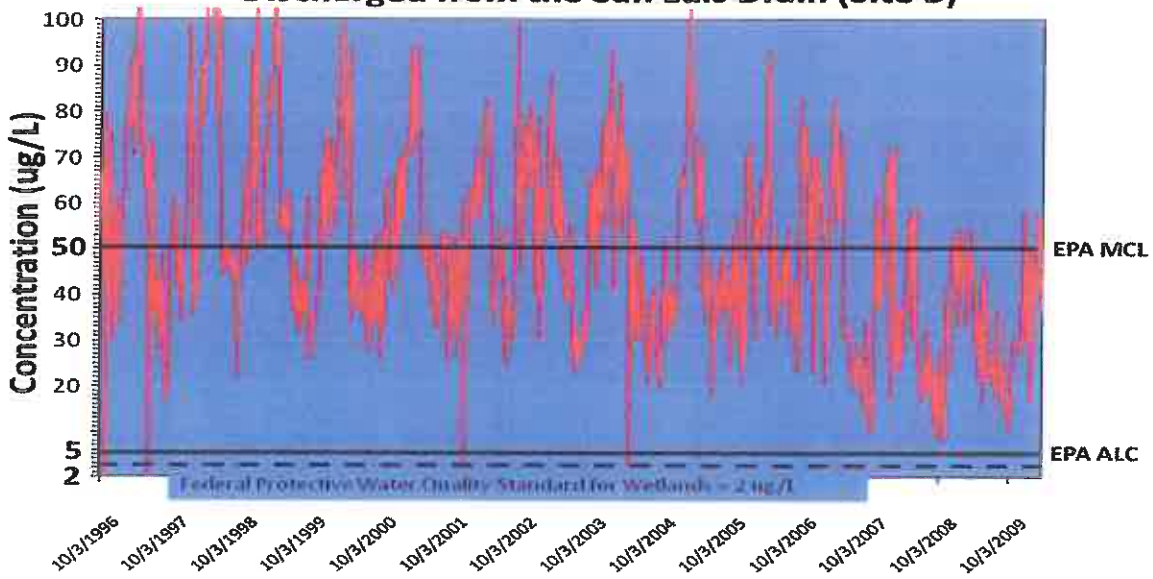


Figure 3

Data from USBR MCL=Maximum Contaminant Level for Drinking Water ALC=Aquatic Life Criterion

Lethal Concentrations of Selenium in Mud Slough (Site D) Passing Through State and National Wildlife Refuges

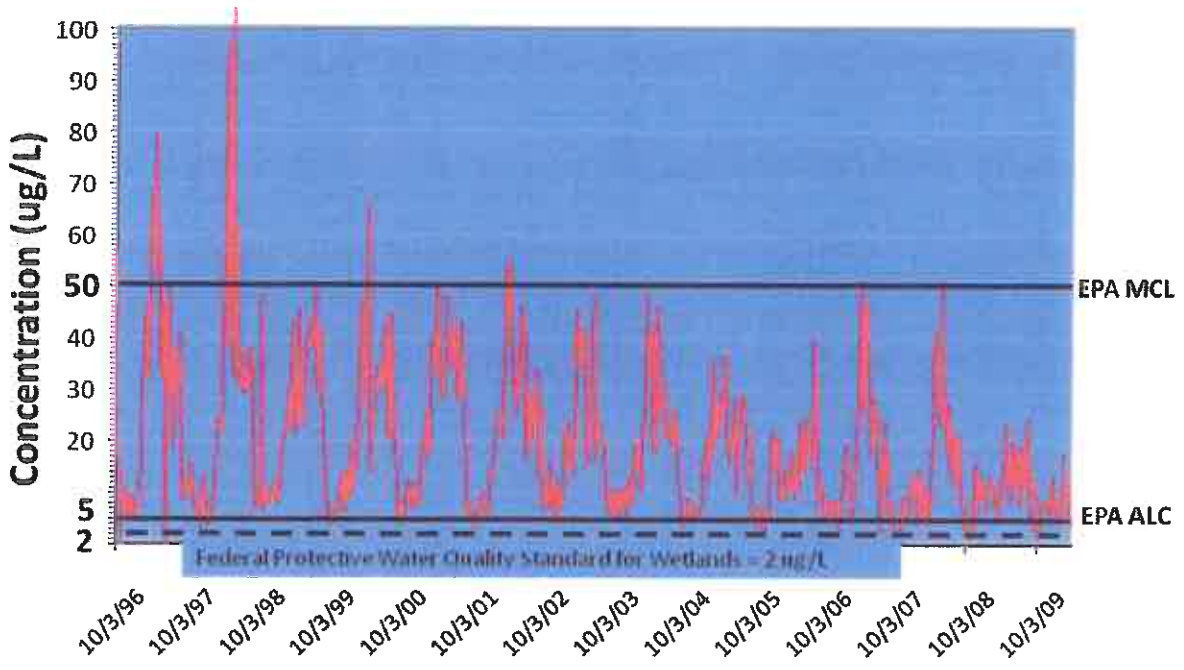
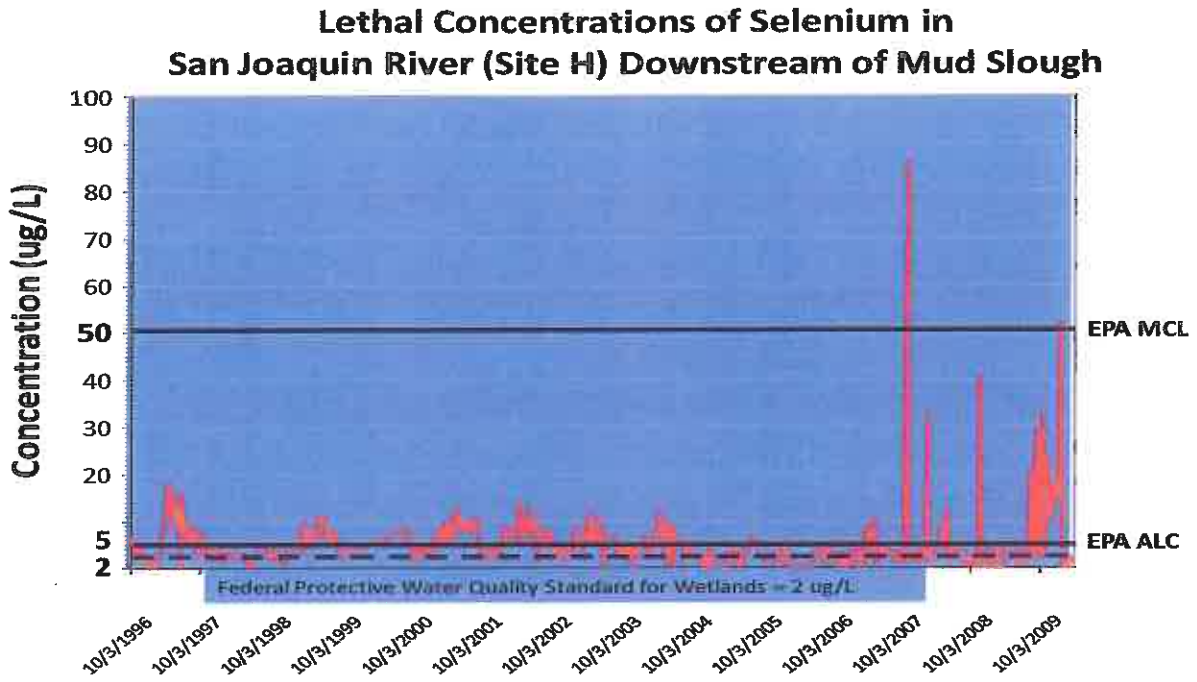


Figure 4

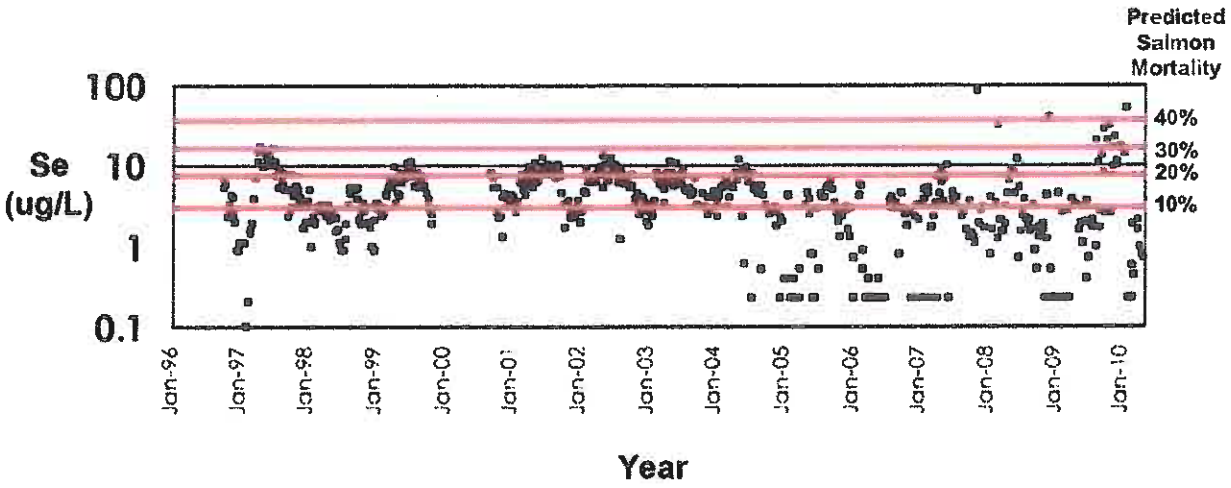
Data from USBR MCL=Maximum Contaminant Level for Drinking Water ALC=Aquatic Life Criterion



Data from USBR MCL=Maximum Contaminant Level for Drinking Water ALC=Aquatic Life Criterion

Figure 5

GBP Selenium Discharged to the San Joaquin River Causes Levels that are Dangerous for Salmon



Selenium concentrations measured in the San Joaquin River at Hills Ferry (data from the U.S. Bureau of Reclamation)

Figure 6

Specific Comments on Draft EA/FONSI for San Luis Drainage Feature Reevaluation Demonstration Treatment Facility At Panoche Drainage District

The Project Does Not Meet Drainage Needs or Existing Waste Discharge Requirements—This Project Is Yet Another Delay in Meeting Clean Water Act Requirements.

The proposed project does not meet the primary need "*to achieve a long-term, sustainable salt and water balance in the root zone of irrigated lands in the San Luis Unit and adjacent areas*" because the proposed demonstration plant will not remove salt from drainage water, nor will it reduce water table elevations. Removal of selenium but not salt from high groundwater does not meet the project need.

The Draft EA/FONSI fails to provide even rudimentary documentation on project costs in order to meet the proposed project purpose to "*demonstrate and operate the reverse osmosis (RO) and selenium biotreatment technologies described in the Feasibility Report in order to collect cost and performance data required for final design of the corresponding full-scale drainage service treatment components to be constructed in Westlands Water District (Reclamation 2008).*" The Draft EA/FONSI excludes the findings of the Feasibility Report that RO treatment is not cost effective compared to the value of crops grown and that substantial increases in subsidies to San Luis Unit contractors would be necessary in order to implement full-scale drainage service.[8]

As stated, the rhetoric used by Reclamation to tout the benefits and success of the San Luis Drainage Grassland Bypass Project is misleading and exaggerates the benefits. Often success is presented in percentages that compare a single year load value with either 1995 or 1996, both 100% supply allocation years, with, for example 2009, when water supply allocation was 10% nor 2008 when it was 40%. Failing to account for water delivery volume differences imported to irrigate these toxic soils

[8] http://www.usbr.gov/mp/sccao/sld/docs/sldfr_report/slfr_3-08_v02.pdf pg 99

evaluate other innovative technologies, which may reduce the cost and environmental impacts as compared to the technologies evaluated in the Feasibility Report, while meeting the requirements for drainage service" because the document fails to identify those "innovative technologies." Because these technologies are not described at all, the reader can only assume that those technologies do not exist.

Failure to Consider a Full Range of Treatment and Pollution Control Alternatives

The Proposed Action does not meet the project need *to achieve a long-term, sustainable salt and water balance in the root zone of irrigated lands in the San Luis Unit and adjacent areas* because it does not remove salt from drainage water nor does it reduce high groundwater levels.

As stated by USGS Director Mark Myers in a letter to Senator Feinstein, May 2008, "*Perhaps the greatest uncertainties in the proposed plans are the technical feasibility of biotreatment of selenium at the scale and salinities to be encountered. (The feasibility report for treatment has still not been released and could not be reviewed for this letter.) Land retirement was the only alternative presented as an option to drainage treatment within the Reclamation EIS. Substitution of deep ground-water pumping that offsets a fraction of the surface water delivery is another alternative that has merit."*[11] [12] No feasibility report for treatment was provided in this DEA or a full range of treatment options. Further, without knowledge of the water chemistry to be treated the public and decision makers cannot make an informed decision regarding the feasibility of removing

[11] http://wwwrcamnl.wr.usgs.gov/Selenium/Library_articles/feinsteinltr0001-from-Director.pdf

[12] http://www.usbr.gov/mp/sccao/sld/docs/sldfr_report/slfr_3-08_v02.pdf pg viii
The San Luis Unit was authorized with two appropriation ceilings. The construction of project works, except for distribution systems and drains, are covered by an indexable ceiling. The ceiling for the distribution systems and drains is not subject to indexing. The combined remaining construction cost ceiling for the San Luis Unit is $428,674,777. The total estimated cost to implement the In-Valley/Drainage-Impaired Land Retirement Alternative is $2.24 billion. The total estimated cost to implement the In-Valley/Water Needs Land Retirement Alternative is $2.69 billion. Thus, implementation of either of these action alternatives would exceed the combined remaining construction cost ceilings for the San Luis Unit.

proposes to directly treat sump water, rather than concentrated sump water that has gone through reuse and concentration at the San Joaquin River Improvement Project. This is a significant change. The decision to treat these polluted flows was based on a reduced volume to reduce the costs. Even that approach was not cost effective. The Proposed Action would result in even greater costs because of the larger volume of drainage to be treated.

The Proposed Action description fails to provide any cost estimates for plant construction, operation, energy needs, energy sources, or disposal of hazardous wastes. A cost-benefit analysis is relevant to the selection of not only the treatment options but weighing these against other alternatives. No cost benefit analysis is provided. Compliance with section 102(2) (B) of NEPA is not adequate given these deficiencies.

Section 3.1 Water Resources—Failure to Provide Meaningful Analysis of the Impacts From the Treatment Approaches.

The Draft EA claims that the project will cumulatively improve water quality and amounts of selenium discharged into Mud Slough would be "much less" but no specific quantities of selenium are provided. Without information or data, the project plan simply states that operating this treatment plant in perpetuity will not have an impact. Quantities of selenium and other contaminants discharged should be provided. Also the water quality parameters of the water to be treated are not provided. The chemistry affects the treatment efficacy. Trace elements, nitrate and other contaminants are known to render biological treatment ineffective in removing selenium. Large quantities of salts and other contaminants impact the effectiveness of reverse osmosis. No details are provided regarding the treatment methods so it is impossible to know what are the potential water pollution impacts and compliance with Clean Water Act standards. The proposal to discharge selenium at 10 µ/L would violate CWA standards.

Additionally, the project fails to identify mercury as a constituent of concern for this project. Additional monitoring of mercury should be performed to determine if it is of concern.[13]

[13] http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826 pgs 94-96 USFWS 2009 BO

the land retirement.

However, it is true that in the Final Fish and Wildlife Coordination Act Report for SLDFRE, the USFWS recommended retirement of all San Luis Unit lands within the Grasslands area.[14] The Fish and Wildlife Coordination Act requires coordination with Fish and Wildlife Service when a permit or license will impact natural water ways or wetlands.....*otherwise controlled or modified for any purpose whatever, including navigation and* ***drainage****, by any department or agency of the United States*. (Emphasis added). Reclamation brushes this requirement aside without a valid justification. Further Reclamation also disregards the recommendation from the USFWS to retire of the 80,000 acres of San Luis Unit lands within the Grasslands Watershed area.[15] A new EIS should be prepared which considers retirement of all San Luis Unit lands within the Grasslands Drainage Area, as recommended previously by the U.S. Fish and Wildlife Service in their Coordination Act Report for SLDFRE.

At page 4, no data is provided to support the opinion, "The facility will be

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[14] USFWS, 2006, Coordination Act Report on San Luis Drainage Feature Re-evaluation. Available at: http://www.usbr.gov/mp/mp150/envdocs/MP700_San%20Luis%20Drain_FinalEIS_App%20M%20(Part%201%20of%204).pdf.

[15] http://www.usbr.gov/mp/mp150/envdocs/MP700_San%20Luis%20Drain_FinalEIS_App%20M%20(Part%201%20of%204).pdf) pg 63:

> *We believe the Service's Preferred Land Retirement Alternative (full retirement) for the San Luis Drain Feature Re-Evaluation Project would release Reclamation from any future obligation to provide drainage service to the SLU while maximizing avoidance of adverse environmental effects. Our contention is that a full retirement alternative represents the most logical and least risky option to finally solve the drainage problem from the perspective of protecting and enhancing regional fish and wildlife resources. This land retirement alternative is compatible with CALFED and CVPIA goals and objectives by reducing project water demand, increasing available supplies, enhancing fish and wildlife habitat, and reducing contaminants reaching the Delta. It is an approach that appears most compatible with both the Service and Reclamation's respective missions, since the goal is to find a drainage solution for the study area which includes measures to preserve, protect, restore, and enhance fish and wildlife resources affected by water deliveries to the SLU.*
>
> *The Service strongly prefers to address SLU drainage issues with options that would eliminate the need for drainage service altogether. The Service believes the SLDFR should seek a more permanent and complete resolution of drainage issues in the San Joaquin Valley. Drain water management is expensive and risk-laden.*

economically—of treatment because of the sheer volumes to be treated if technically feasible. USGS estimates at 50 years, with 100,000 acres of land retirement and treatment for the rest of the drainage, there will be a requirement for salt storage of 20 million tons in evaporators or landfills. This salt will be contaminated with a variety of trace elements common in drainage waters including selenium, boron, molybdenum, chromium, and arsenic.[17]

3.9.2 Socioeconomic Impacts

What is the expected cost savings to the Panoche Drainage District from the reduced selenium discharged into Mud Slough? How many pounds will it be and what is the rate of savings?

3.10 Air Quality Impact and 3.11 Global Climate Impacts Not Fully Considered.

The Draft EA/FONSI is grossly inadequate in its evaluation of air quality and the impact on global climate change. The document fails to identify the source or amount of necessary electricity to run the demonstration plant. Will the project use CVP Project Power? If so, what will be the source of replacement power for CVP preference customers from increased demand for CVP Project Use Power? It is likely that replacement power would be generated from fossil fuels. Therefore, the air quality section completely fails to identify the air quality impacts of replacement fossil fuel energy. How much energy will it be and what kind of load will it create on the system? How much will the Western Area Power Administration's (WAPA) customer costs increase to purchase replacement power? How will it affect the power allocation and costs of the Hoopa Valley Tribe's WAPA contract? How will cost increases affect low income populations such as those within the Trinity Public Utilities District boundaries? If the plant is turned over to the contractors, who will pay for the energy for the plant? Is it a reimbursable CVP expense or non-reimbursable?

Cumulatively, a revised document should identify the expected global warming and air quality impacts from the replacement energy demand from fossil fuels for a fully built-out drainage system for the San Luis Unit, as well as, cost impacts to CVP customers, including low income and tribal customers.

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[17] http://pubs.usgs.gov/of/2008/1210/ pg 2.